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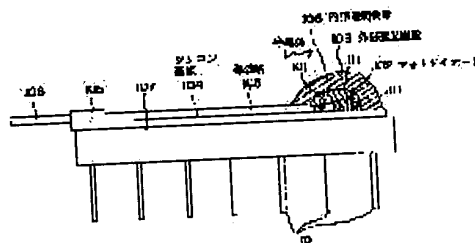
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## (54) OPTICAL SEMICONDUCTOR DEVICE MODULE

(57)Abstract:

**PROBLEM TO BE SOLVED:** To provide a semiconductor device module which is easily optically coupled, easily fixed, shortened in assembly time, lessened in manufacturing cost, and excellent in stability.

**SOLUTION:** In an optical semiconductor device module, a semiconductor optical element and a part of a waveguide optically connected to the semiconductor optical element are covered with a first resin 108, which is not thermally deformed to cause damage to the semiconductor optical element and transparent to light rays of certain wavelengths which are optically detected by or emitted from the semiconductor optical element, and the outer surface of the first resin 108 is covered with a second resin 109 which is opaque to light rays present in an environment where the semiconductor optical element is employed and moisture-resistant, that is, the semiconductor optical element is of double resin-sealed structure. By this setup, an optical semiconductor device module of excellent quality is obtained, wherein optical coupling is easily made, members are easily fixed, an assembly time is shortened, an optical element is protected against damage caused by thermal instability and deformation, light rays can be emitted outside an introduced from outside enough, noises caused by leakage light rays (e.g. sunlight) from the outside are prevented, and an enough S/N ratio is obtained. Therefore, an optical semiconductor device module excellent in stability can be delivered at a low cost.



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